#8 Response w/exhibits
LWorga-
4/15/03

213740US3 DIV

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF	:
SHINJI KOMATSU	: EXAMINER: HARMON, C.
SERIAL NO: 09/961,137	:
FILED: SEPTEMBER 24, 2001	: GROUP ART UNIT: 3721

FOR: PACKAGE BAG AND PACKAGING DEVICE

REQUEST FOR RECONSIDERATION

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

In response to the Office Action dated January 29, 2003, Applicant requests the reconsideration of the non-final rejection of Claims 1 and 2, for the reasons set forth below.

The claims are directed to a device for continuously producing a package bag having a strippable seal formed at least in part of a thermally-sealed side portion. For example, a package bag may have thermally-sealed side portions 4, one of which (e.g., 4a) is a strippable seal having a wave-like shape, which shape concentrates the forces and helps initiate separation of the strippable seal.

According to the invention, the strippable seal is formed by a pair of thermal rolls having annular projections between which the film is conveyed to form the strippable seal, wherein at least one of the annular projections has a wave-like or zig-zag shape. For example, referring to the non-limiting embodiment of the figures, a film F is doubled or folded and delivered by a conveying device including the side rolls 60 to the nip between the

thermal rolls 81. As best seen in Figures 12-15, the thermal rolls each includes annular projections 82 arranged to provide therebetween the nip through which the film is conveyed. One or more of the annular protrusions or projections 82 has a zig-zag portion 82a-82c, so as to produce the wave-like or zig-zag shape for the strippable seal, as shown in Figure 12.

In view of the above, Claim 1 recites a device for continuously producing a package bag for enclosing an object to be packed, which package bag comprises a film having an easily-peelable fusion-bonded sealant layer, and thermally-sealed side portions to enclose the object to be packed in the package bag, wherein at least one of the thermally-sealed side portions along one of the sides is a strippable seal which is associated with an unsealed portion forming stripping margins positioned between the strippable seal and the film edge, and wherein the strippable seal is formed in at least a part of the one of the thermally-sealed side portions and extends fully through another one of the thermally-sealed side portions, the device comprising a pair of thermal rolls having annular projections, and a conveying device arranged to convey film which forms the package bag between the annular projections of the pair of thermal rolls so as to form the strippable seal, wherein at least one of the annular projections has a wave-like or zig-zag shape. Claim 2 further recites that the thermal rolls are arranged to provide a nip between the annular projections.

Claims 1 and 2 stand rejected under 35 U.S.C. § 103 as being obvious over the U.S. patent to Johnson in view of the U.S. patent to Francis. The Examiner there alleges that Johnson discloses an apparatus for making and filling a bag having a strippable seal and "comprising a pair of thermal sealing bars 2159 for embossing a wavelike or zig-zag shape upon the bag material 2056 passing between; see figures 19 and 33."

This rejection is respectfully traversed. As a threshold matter, Applicant notes that Johnson fails to disclose a device for producing a package bag having a strippable seal of a

wave-like or zig-zag shape. None of the seals produced by the thermal sealing bars 2159 is shown or described as having a wavelike or zig-zag shape. Johnson describes the seals 2056, 2058 and 2060 in the paragraph beginning at line 4 of column 16. As is there described, the sealing bar 2159 simultaneously forms and seals 2056, 2058 and 2060 and severs the finished bag. However the seals 2056, 2058 and 2060 are nowhere described or shown as being a strippable seal or as having a wave-like or zig-zag shape. Thus Johnson does not even disclose a device for continuously producing a package bag having a strippable seal.

Beyond this, as the Examiner has recognized, the thermal sealing bars 2159 of Johnson are not a pair of thermal rolls having annular projections and combined with a conveying device which conveys a film between the annular projections so as to form a strippable seal having a wave-like or zig-zag shape. The Examiner has therefore relied upon Francis to teach thermal rollers 45 and 46, and has alleged that it would have been obvious in view of Francis to use thermal rollers with annular projections as a substitute for the sealing bars 2159 of Johnson. However, no such combination would have been obvious to those skilled in the art at the time of the invention, for a number of reasons.

First, there is no description that the thermal sealing bars 2159 seal the film while it is moving, as would occur with thermal rolls. Indeed, the only description of a sealing operation in Johnson (column 21, lines 5-16) indicates that the sealing bars seal a length of film while the film is stationary, and then pull the film downward to advance the bag between sealing operations. Since the sealing bars of Johnson seal a *stationary* length of film, those skilled in the art would not have thought it obvious to replace them with sealing rollers which would seal a *moving* length of film.

More significantly, those skilled in the art would not have been motivated to have combined Johnson with Francis, if only because Francis is not directed to the sealing of a packaging bag as is Johnson, but is instead concerned with the heat treatment of a fibrous textile product. The Examiner has specifically referred to Figure 6 of Francis for a teaching of thermal rollers 45 and 46. However, the rollers of 45 and 46 of Francis are heated rollers having a number of rod-like projections 47 — *not annular projections having a wave-like or zig-zag shape* — so as to penetrate a felt-like structure of a fibrous product and activate the thermoplastic fibers thereof (column 7, lines 58-71). This construction has no relation to the formation of a strippable seal on a package bag, and those skilled in the art clearly would not have been motivated to have sought an improvement in the formation of the seals in Johnson by substituting the fiber activation structure of Francis for the seal-forming bars of Johnson.

Finally, it is noted that Francis does not even teach an annular projection having a wave-like or zig-zag shape, and so the subject matter of the claims would not be taught by Francis even if it were obvious to combine Johnson and Francis. Applicant therefore respectfully submits that no combination of the above references would render obvious the subject matter of any of the claims.

Applicant is submitting the following materials for the Examiner's reference:

1. Attachment A — a brochure showing a commercial product (EPACK) manufactured using the apparatus according to the present invention.

2. Attachment B — a box with packed cheese enclosed in package bags manufactured using the apparatus according to the present invention.

3. Attachment C1 and C2 — comprising bags with packed soup packaged using the apparatus according to the present invention.

4. Attachment D — packed, sweetened and jellied bean paste packaged using the apparatus according to the present invention.

5. Attachment E — a brochure about devices manufactured by the assignee of the present application.

6. Attachment F — a brochure of the assignee company.

Applicant believes that the present application is in a condition for allowance and respectfully solicits an early notice of allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Gregory J. Maier
Attorney of Record
Registration No. 25,599
Robert T. Pous
Attorney of Record
Registration No. 29,099

22850

(703) 413-3000
GJM:RTP/kst

I:\atty\RTP\213740us-am1.wpd